

### **REMARKS**

Claims 1, 3-6 and 8-19 are pending in the present application.

### **Priority Under 35 U.S.C. 119**

Applicant notes the Examiner's acknowledgement of the claim for priority under 35 U.S.C. 119, and receipt of the certified copy of the Priority Document.

### **Drawings**

In the drawing Replacement Sheet filed along with the Amendment dated November 30, 2004, Figs. 4(A) and 4(B) have been corrected whereby the silicon substrate and the field oxide film have been denoted respectively as 110 and 120. **The Examiner is respectfully requested to acknowledge receipt of the drawing Replacement Sheet as enclosed along with the Amendment dated November 30, 2004, and to confirm acceptance of the drawing Replacement Sheet.**

### **Claim Rejections-35 U.S.C. 103**

Claims 11-19 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the Shinohara reference (U.S. Patent No. 6,245,603) in view of the Wada et al. reference (Japanese Patent Publication No. 2003-017578) and the Oda et al. reference (U.S. Patent No. 5,945,710). This rejection is respectfully traversed for the following reasons.

The Examiner has primarily relied upon Figs. 3A and 4A – 4C of the Shinohara reference in a somewhat similar manner as in the previous Office Action dated September 22, 2004. The Examiner has however acknowledged that the Shinohara reference fails to disclose the required pocket regions and the required conductivity/doping requirement.

In order to overcome these above noted acknowledged deficiencies of the Shinohara reference, the Examiner has alleged that the Wada et al. reference “disclose a semiconductor device and its manufacturing method where in Figs. 3 and 5 the required pocket regions are disclosed”. The Examiner has further alleged that it would have been obvious to include the required pocket regions and doping/conductivity structures in Shinohara as taught by the Wada et al. and the Oda et al. references respectively “in order to have a semiconductor structure with ease of manufacture”. Applicant respectfully disagrees for the following reasons.

Applicant initially submits that the Examiner has not established the necessary motivation to modify the primarily relied upon Shinohara reference in view of the secondarily relied upon Wada et al. and Oda et al. references. The Examiner has merely asserted that it would have been obvious to modify the primarily relied upon Shinohara reference in view of the secondarily relied upon Wada et al. and Oda et al. references “in order to have a semiconductor structure with ease of manufacture”. However, the Examiner has not explained how modification of the structure in Figs. 3A and 4A- 4C of the Shinohara reference in view of the structures disclosed in Figs. 3 and

5 of the Wada et al. reference could possibly result in "ease of manufacture" of a semiconductor structure. The Examiner has not identified any reasons as specifically provided by the Wada et al. reference that would motivate one of ordinary skill to modify the structure in the Shinohara reference in any manner whatsoever, or more particularly to meet the features of claim 11. In absence of such necessarily established motivation, any modification of the primarily relied upon Shinohara reference in view of the secondary references in the manner suggested by the Examiner would appear to be based merely upon impermissible hindsight. Applicant therefore respectfully submits that the semiconductor device of claim 11 would not have been obvious in view of the prior art as relied upon by the Examiner taken singularly or together, and that this rejection of claims 11-19 is clearly improper for at least these reasons.

With further regard to this rejection, the Examiner has apparently interpreted regions 17 in Fig. 3 and regions 7 in Fig. 5 of the Wada et al. reference as the pocket regions of claim 11. However, regions 17 and 7 as respectively shown in Figs. 3 and 5 of the Wada et al. reference do not extend from within a source region and a drain region to underneath the corresponding gate electrodes (15, 5). More particularly, regions 17 and 7 of the Wada et al. reference do not extend from inside a source region and a drain region "at a second depth that is shallower than the first depth, to underneath the gate electrode at a third depth that is equal to or deeper than the first depth", as would be necessary to meet the features of claim 11. That is, regions 17 and 7 in Figs. 3 and 5 of the Wada et al. reference appear to merely extend in a

horizontal direction.

Accordingly, even assuming that proper and necessary motivation existed for modifying the structure of the Shinohara reference in view of the Wada et al. reference (which motivation Applicant does not concede exists), modification of the structure in the Shinohara reference in view of the secondary prior art (the Wada et al. reference in particular) would not make obvious the features of claim 11. That is, the combined teaching would not include a pair of pocket regions as would be necessary to meet the features of claim 11. Applicant therefore respectfully submits that the semiconductor device of claim 11 would not have been obvious in view of the prior art as relied upon by the Examiner taken singularly or together, and that this rejection of claims 11-19 is improper for at least these additional reasons.

### **Conclusion**

The Examiner is respectfully requested to reconsider and withdraw the corresponding rejection, and to pass the claims of the present application to issue, for at least the above reasons.

In the event that there are any outstanding matters remaining in the present application, please contact Andrew J. Telesz, Jr. (Reg. No. 33,581) at (571) 283-0720 in the Washington, D.C. area, to discuss these matters.

Pursuant to the provisions of 37 C.F.R. 1.17 and 1.136(a), the Applicant hereby petitions for an extension of three (3) months to April 22, 2005, for the period in which

to file a response to the outstanding Office Action. The required fee of \$1020.00 should be charged to Deposit Account No. 50-0238.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment for any additional fees that may be required, or credit any overpayment, to Deposit Account No. 50-0238.

Respectfully submitted,

VOLENTINE FRANCOS & WHITT, P.L.L.C.

A handwritten signature in black ink, appearing to read "A. J. Telesz, Jr.", with a stylized flourish at the end.

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